

B-113-CA-1



Environmental  
Science &  
Engineering, Inc.

cc: Maywood  
USEPA

JICM  
WTS

December 5, 1995

ILD 074 424 938

Mr. William Sinnott  
Corrective Action Unit  
Bureau of Land  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62794-9276

US EPA RECORDS CENTER REGION 5



1000551



RE: Progress Report  
RCRA RFI Phase II Investigation  
Detrex Corp., Melrose Park, IL  
ESE Project No. 559-5160

Dear Mr. Sinnott:

On behalf of Detrex Corporation, Environmental Science & Engineering, Inc. (ESE) has prepared this progress report for the above referenced project. This report presents a brief description of the investigation activities completed to date at the Melrose Park, Illinois facility.

On September 25, 1995, ESE mobilized to the site to initiate the Phase II investigation activities. From September 25 to October 3, 1995, a total of 23 soil borings were drilled and six (6) groundwater monitoring wells were installed. A total of 164 soil samples were collected from the borings and submitted for laboratory analysis for Volatile Organics (VOCs) and Polynuclear Aromatic Hydrocarbons (PAHs).

Twenty-one (21) soil borings and four (4) monitoring wells were completed at the site per the Phase II Workplan (see Figure 1 attached). The locations for the three soil borings performed inside the building (BH32 - BH34) were modified from the Workplan in order to minimize impacts to the sealed concrete floor of the Hazardous Waste Container Storage Area and reduce disruptions to site activities.

Two (2) soil borings and groundwater monitoring wells were completed off-site to assess background soil and groundwater conditions (see Figure 2). The background soil borings and monitoring wells were completed in a similar manner as the on-site borings and wells. The completion of the two background borings/wells represent a modification to the Phase II Workplan which specified the collection of 10 surface soil samples for PAH analysis. The justification for the modification was supported by the decision that "at depth" background soil samples would provide a better comparison for the "at depth" soil samples collected on-site. Additionally, the performance of the deeper background borings allowed the installation of groundwater monitoring wells within the borings so that background water quality could also be assessed.

Each of the six monitoring wells were constructed of 2-inch I.D. stainless steel well material as specified in the Workplan. The wells were installed to a depth of approximately 15 feet below grade. The depth for completion of the monitoring wells was determined by allowing boring BH19 to remain open for approximately 4 days and observing the rise of groundwater within the open borehole. Field observations from boring BH19 suggested a static groundwater level of approximately nine feet below land surface.

Following installation, groundwater levels were measured in the monitoring wells. At the completion of the drilling activities on October 3, each of the six wells were determined to be dry. ESE returned to the site on October 9, 1995 and determined that the depth to groundwater in wells MW-1, BG-1 and BG-2 was 14.44, 7.09 and 4.23 feet, respectively. The remaining wells (MW-2, MW-3 and MW-4) were dry at that time.

On October 16, ESE returned to the site to assess the groundwater levels in the monitoring wells. Groundwater was measured in wells MW-1, MW-2, BG-1 and BG-2 at 11.34, 14.65, 4.83 and 4.31 feet below land surface (BLS), respectively. Wells MW-3 and MW-4, located south of the plant were found to be dry. Based on this data, ESE concluded that groundwater in background wells BG-1 and BG-2 had likely reached equilibrium, but since groundwater in the on-site wells MW-1 and MW-2 had not stabilized, groundwater samples were not collected.

On October 31, ESE again visited the site to assess groundwater levels in the monitoring wells. At that time, only well MW-3 was determined to be dry. Groundwater levels measured in wells MW-1, MW-2, MW-4, BG-1 and BG-2 were 6.02, 12.48, 13.29, 4.00 and 3.21 feet BLS, respectively. Additionally, slug tests were performed on wells MW-1 and MW-2 to assess hydraulic conductivity of the soils at the site.

On November 10, ESE returned to the site to assess groundwater levels and collect groundwater samples from those wells containing a sufficient volume of water to allow sampling. At that time, well locations MW-4 and BG-2 were flooded as a result of recent rains and could not be sampled. Also, well MW-3 was determined to be dry and was not sampled. Groundwater samples were collected from wells MW-1, MW-2 and BG-1 and submitted for VOC and PAH analysis. Groundwater levels measured in wells MW-1, MW-2 and BG-1 at the time of sampling was 5.27, 11.39 and 3.74 feet BLS, respectively.

On November 17, ESE visited the site with the purpose of collecting groundwater samples from the remaining wells. At that time, well MW-3 was dry and was not sampled. Groundwater samples were collected from wells MW-4 and BG-2 and submitted for VOC and PAH analysis. Groundwater levels measured in wells MW-4 and BG-2 at the time of sampling were 11.29 and 2.43 feet BLS, respectively.

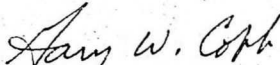
Mr. William Sinnott  
IEPA  
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Page 3

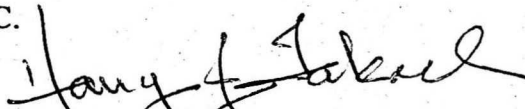
At the time of this progress report, laboratory data for the soil samples have been received and validation of the data has been initiated. Evaluation of the geologic and hydrogeologic data collected during the investigation is currently underway. Receipt of laboratory results for the groundwater samples is anticipated within one to two weeks. Based on the progress completed on the Phase II Investigation, ESE anticipates completion of the Phase II report for submittal to the IEPA by the February 1, 1996 as modified in a letter from Detrex Corporation dated November 16, 1995.

If you have any questions or require additional information, please feel free to contact either of the undersigned.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

  
Gary W. Cobb, C.P.G.  
Project Geologist

  
Harry J. Takach, D.E.  
Associate Vice President

cc: Mr. Issa Shamiyeh - Detrex Corporation  
cc: Mr. Jim Moore - IEPA

Attachments

95120503.LTR

GWC/HJT:gwc

BH23/MW1

BH24

BH25/MW2

SWMU #3 (TANK CAR UNLOADING AREA)

OVERHEAD LINE

BH20

BH21

BH22

VIRGIN  
PRODUCT  
TANKSSWMU #4  
UNDERGROUND  
STORAGE TANK

SWMU #2

(FUEL  
SPILL  
AREA)

LOADING DOCK

500-GALLON  
HEATING OIL  
TANKHAZARDOUS  
WASTE  
CONTAINER  
STORAGE  
AREA

HEATER NO. 1

BH34

DIKE  
WAREHOUSEDIKE  
RAMPDEPRESSED  
TRUCK  
DOCK

BH15

CB

CONCRETE  
DRIVE

BH14

BH16

BH17

BH18

BH19

DIKE  
WAREHOUSEDIKE  
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NORTH AVENUE

AL PIEMONTE FORD

U.S. POST OFFICE

25th AVENUE

BG-1

VACANT  
BUILDING

INTERSTATE  
PAPER

FINISHING  
LINE

DETREX  
CORP.

LA MANTIA PLASTICS INC.

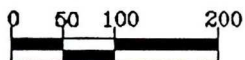
VACANT  
BUILDING

BG-2

LEMOYNE

HANDY BUTTON  
COMPANY

SCALE



■ BACKGROUND SAMPLE LOCATION



ENVIRONMENTAL  
SCIENCE &  
ENGINEERING, INC.

5440 N. CUMBERLAND AVE.  
SUITE 111  
CHICAGO, ILLINOIS 60656

PROJECT NO. 559-5160

DATE: 11/06/95

DRAWN BY: R. HIATT

CHECK BY:

BACKGROUND SOIL SAMPLE LOCATIONS  
RFI PHASE II WORK PLAN  
DETREX CORPORATION  
MELROSE PARK, ILLINOIS  
prepared for  
DETREX CORPORATION

FIGURE NO.

2

FILE NO.

B950837

B-113

**CRA**

Consulting Engineers

cc: Maywood  
USEPA

J/KH  
WTS

**CONESTOGA-ROVERS & ASSOCIATES LIMITED**

651 Colby Drive  
Waterloo, Ontario, Canada N2V 1C2  
(519) 884-0510 Colby Office Fax: (519) 884-0525  
(519) 725-3313 Bathurst Office (519) 725-1394

October 27, 1993

Reference No. 5222

Mr. William T. Sinnott II  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, IL  
U.S.A. 62794-9276

ILDO074424938

Dear Mr. Sinnott:

Re: Quarterly Progress Report Number 2  
Phase I RCRA Facility Investigation  
Detrex Corporation, Melrose Park, Illinois

D.2.8

In accordance with Condition 15 of the Approval of the RCRA Facility Investigation (RFI) Phase I Work Plan, Detrex Corporation, Melrose Park, Illinois, please find enclosed as Table 1, a summary of the RFI activities at the above referenced site for the reporting period July 1, 1993 to September 30, 1993.

If you have any questions or comments, please do not hesitate to contact Mr. Bill Moore at (313) 358-5800 or the undersigned at (519) 884-0510.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES



Ed Roberts, P. Eng.  
ER/cf/1

Encl.

c.c. Bill Moore, Detrex

NOV - 8 1993

## **TABLE 1**

### **SUMMARY OF ACTIVITIES PHASE I RFI QUARTERLY PROGRESS REPORT NUMBER 2 DETREX CORPORATION, MELROSE PARK, ILLINOIS**

#### **A. Estimate of Percentage of the Investigation Completed**

- Since initiation of Phase I RFI, June 22, 1993, it is estimated that 10 percent of the investigation has been completed.

#### **B. Summary of Activities Completed During the Reporting Period**

- Detrex Corporation actively pursued an access agreement for Phase I RFI activities with the property owner. It is anticipated that the access agreement will be secured in the near future.

#### **C. Changes in Phase I RFI Work Plan Activities**

- No changes in Phase I RFI Work Plan activities during this reporting period.

#### **D. Problems Encountered**

- No problems were encountered in the performance of the work of this reporting period.

#### **E. Action to Rectify Problems**

- No problems were encountered in the performance of the work of this reporting period.

#### **F. Planned Activities for Next Reporting Period**

- Commence Phase I RFI field activities in accordance with the approved Work Plan upon securement of an access agreement with the property owner. A revised schedule is presented in Figure 1, attached. As shown on the schedule, it is anticipated that Phase I RFI field activities will be completed by December 15, 1993 in accordance with the IEPA approval letter dated September 10, 1993.

#### **G. Additional Information Requested**

- No requests for additional information were received during the reporting period.

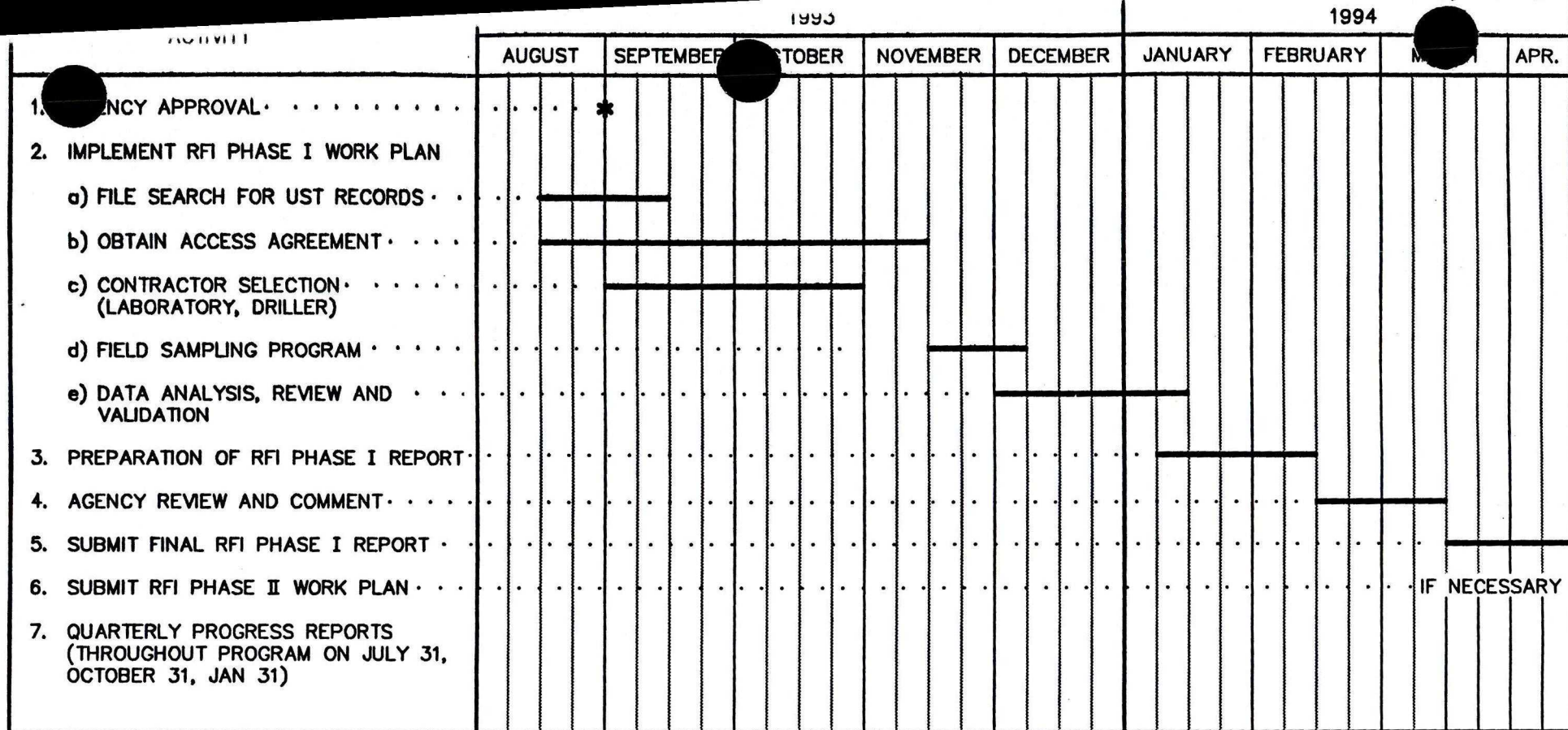


figure 1  
 REVISED PROJECT SCHEDULE  
 RFI PHASE I WORK PLAN  
*Detrex Corporation, Melrose Park, IL*

**CRA**